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Notice of Allowability	Application No.	Applicant(s)
	09/912,270	HOTCHKISS ET AL.
	Examiner	Art Unit
	Anthony Weier	1761
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHT of the Office or upon petition by the applicant. See 37 CFR 1.313	ears on the cover sheet with (OR REMAINS) CLOSED in or other appropriate commun GHTS. This application is su and MPEP 1308.	this application. If not included nication will be mailed in due course. THIS
· -	ea 0/2/03 .	
2. The allowed claim(s) is/are <u>1,2 and 12-19</u> .		
3. ☐ Acknowledgment is made of a claim for foreign priority una) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have	e been received.	
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or i	n the Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s)	5 - - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	
1. Notice of References Cited (PTO-892)		ormal Patent Application (PTO-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ⊠ Interview Sur Paper No./N	mmary (P1O-413), Iail Date
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0		mendment/Comment
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's S	statement of Reasons for Allowance
of Biological Material	9. Other	

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard Schwartz on 10/26/05.

The application has been amended as follows:

In the Claims:

Cancel non-elected product claim 21.

EXAMINER'S REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

With respect to the prior art of record, the examiner agrees with Applicants arguments for reasons for allowance. In addition to such arguments, Kato et al provides a process wherein a fermented soybean milk attains added carbon dioxide not by addition of same from an outside source through sparging but as a result of the fermentation process itself. There is no motivation to modify said process to add carbon dioxide by sparging since carbon dioxide is already produced therein. In addition, the instant claims call for a particular quantity of carbon dioxide in the treated liquid wherein same is specific to a combination with heating to inactivate bacteria and other pathogens in the liquid. Kawakami et al does not disclose the amount of carbon dioxide used and there is no motivation in the prior art of record as to how or why one would

arrive at such specific carbon dioxide concentration. Moreover, it should be noted that the use of the carbon dioxide in Kawakami et al is employed to reduce the pH of the liquid and protect same from decomposition during the sterilization process (e.g. col. 6, lines 47-67). Also, the instant claims call for the removal of free carbon dioxide from the liquid upon completion of the thermal inactivation process by application of a vacuum. Kawakami et al contradicts such removal carbon dioxide by disclosing gradual removal of same by passive removal or removal by use of a gas absorber wherein same occurs not only after the sterilization process but also during same (e.g. col. 7, lines 1-14). Kawakami et al employs such approach "so that the pH of the sterilized infusion is ultimately brought to a level approximating the pre-sterilization pH....the pharmaceutical composition [therein] has the advantage that the risk of degradation due to the formation of free fatty acids due to acidification of the fluid is avoided....[and] by this procedure, the pH of the medicinal fluid can be returned to the pH level prior to dissolution of carbon dioxide gas... with the result that not only can the pH of the fluid be controlled within the physiological pH range but the risk of formation of 5-HMF and production of free fatty acids due to the excessive acidity of the fluid can be prevented" (col. 7, lines 1-35). There is no motivation in the prior art of record to modify the process of Kawakmi et al to entail the application of a vacuum (an active step) upon completion of the thermal inactivation step.

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A pertinent reference, US Patent Application Publication No. US 2002/0044994 (Spencer) that has not been previously cited is addressed herein as it possesses a significant portion of the instant invention. Spencer discloses sparging to saturation a Art Unit: 1761

fruit juice with a gas including a carrier gas such as carbon dioxide wherein the juice may then be sterilized under gas saturation. The fruit juice is retained under such gas treatment the duration of storage wherein same provides a juice product having an improved flavor and aroma. It is expected that the carbon dioxide present would contribute in the invactivation of bacteria in the same manner as set forth in the instant claims. However, although the gas would inherently be released as a result of opening the container at some point, Spencer is silent regarding its removal by vaccum and to do same "upon completion of the thermal inactivation process". Spencer essentially teaches away from the instant invention in that the sparged gas is intended to remain in the stored juice throughout storage. Furthermore, there would be no motivation to modify Spencer to allow for the removal of the sparged gas (or free amount of same) "upon completion of the thermal inactivation process."

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony Weier October 27, 2005 Anthony Weier Primary Examiner Art Unit 1761

10/27/05